State of Utah

Wildland-Urban Interface Minimum Standards

Condensed from the International Urban-Wildland Interface Code

DRAFT

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PREFACE

The standards outlined in this document are intended to be the minimum necessary for development of homes and/or subdivisions in the wildland-urban interface areas of Utah. Local conditions and circumstances could require heightened or additional standards beyond those provided in this document. Code authorities (county, city, etc.), in cooperation with fire officials, should consider their local conditions to determine what measures are needed to develop safe homes and subdivisions in the wildland-urban interface setting.

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CHAPTER 1

ADMINISTRATION

SECTION 101
GENERAL

101.1 Scope. The provisions of this code shall apply to the construction, alteration, movement, repair, maintenance and use of any building, structure or premises within the urban-wildland interface areas in this jurisdiction.

Buildings or conditions in existence at the time of the adoption of this code are allowed to have their use or occupancy continued, if such condition, use or occupancy was legal at the time of the adoption of this code, provided such continued use does not constitute a distinct danger to life or property. Buildings or structures moved into or within the jurisdiction shall comply with the provisions of this code for new buildings or structures.

101.2 Objective. The objective of this code is to establish minimum regulations consistent with nationally recognized good practice for the safeguarding of life and property. Regulations in this code are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels.

The development and use of property in urban-wildland interface areas is a potential threat to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fires and to provide adequate fire-protection facilities to control the spread of fire in urban-wildland interface areas shall be in accordance with this code.

This code shall supplement the jurisdiction's building and fire codes, if such codes have been adopted, to provide for special regulations to mitigate the fire- and life-safety hazards of the urban-wildland interface areas.

101.3 Retroactivity. The provisions of the code shall apply to conditions arising after the adoption thereof, conditions not legally in existence at the adoption of this code, to conditions which, in the opinion of the code official, constitute a distinct hazard to life or property.

101.4 Additions or alterations. Additions or alterations may be made to any building or structure without requiring the existing building or structure to comply with all of the requirements of this code, provided the addition or alteration conforms to that required for a new building or structure.

> **Exception:** Provisions of this code that specifically apply to existing conditions are retroactive. See Section and 501.1.

Additions or alterations shall not be made to an existing building or structure that will cause the existing building or structure to be in violation of any of the provisions of this code nor shall such additions or alterations cause the existing building or structure to become unsafe. An unsafe condition shall be deemed to have been created if an addition or alteration will cause the existing building or structure to become structurally unsafe or overloaded; will not provide adequate access in compliance with the provisions of this code or will obstruct existing exits or access; will create a fire hazard; will reduce required fire resistance or will otherwise create conditions dangerous to human life.

101.5 Maintenance. All buildings, structures, landscape materials, vegetation, defensible space or other devices or safeguards required by this code shall be maintained in conformance to the code edition under which installed. The owner or the owner's designated agent shall be responsible for the maintenance of buildings, structures, landscape materials and vegetation.

SECTION 102
AUTHORITY OF THE CODE OFFICIAL

102.1 Powers and duties of the code official. The code official is hereby authorized to administer and enforce this code, or designated sections thereof, and all ordinances of the jurisdiction pertaining to designated urban-wildland interface areas. For such purposes, the code official shall have the powers of a law enforcement officer.

102.2 Interpretations, rules and regulations. The code official shall have the power to render interpretations of this code and to adopt and enforce rules and supplemental regulations to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformance to the intent and purpose of this code. A copy of such rules and regulations shall be filed with the clerk of the jurisdiction and shall be in effect immediately thereafter. Additional copies shall be available for distribution to the public.

102.3 Liability of the code official. The code official charged with the enforcement of this code, acting in good faith and without malice in the discharge of the duties required by this code or other pertinent law or ordinance, shall not thereby be rendered personally liable for damages that may accrue to persons or property as a result of an act or by reason of an act or omission in the discharge of such duties. A suit brought against the code official or employee because of such act or omission performed by the code official or employee in the enforcement of any provision of such codes or other pertinent laws or ordinances implemented through the enforcement of this code or enforced by the code enforcement agency shall be defended by this jurisdiction until final termination of such proceedings, and any judgment resulting therefrom shall be assumed by this jurisdiction. The code enforcement agency

or its parent jurisdiction shall not be held as assuming any liability by reason of the inspections authorized by this code or any permits or certificates issued under this code.

102.4 Other agencies. When requested to do so by the code official, other officials of this jurisdiction shall assist and cooperate with the code official in the discharge of the duties required by this code.

SECTION 103
COMPLIANCE ALTERNATIVES

103.1 Practical difficulties. When there are practical difficulties involved in carrying out the provisions of this code, the code official is authorized to grant modifications for individual cases on application in writing by the owner or a duly authorized representative. The code official shall first find that a special individual reason makes enforcement of the strict letter of this code impractical, the modification is in conformance to the intent and purpose of this code, and the modification does not lessen any fire protection requirements or any degree of structural integrity. The details of any action granting modifications shall be recorded and entered into the files of the code enforcement agency.

If the code official determines that difficult terrain, danger of erosion or other unusual circumstances make strict compliance with the vegetation control provisions of the code detrimental to safety or impractical, enforcement thereof may be suspended, provided that reasonable alternative measures are taken.

103.2 Technical assistance. To determine the acceptability of technologies, processes, products, facilities, materials and uses attending the design, operation or use of a building or premises subject to the inspection of the code official, the code official is authorized to require the owner or the person in possession or control of the building or premises to provide, without charge to the jurisdiction, a technical opinion and report. The opinion and report shall be prepared by a qualified engineer, specialist, laboratory or fire safety specialty organization acceptable to the code official and the owner and shall analyze the fire safety of the design, operation or use of the building or premises, the facilities and appurtenances situated thereon and fuel management for purposes of establishing fire hazard severity to recommend necessary changes.

103.3 Alternative materials or methods. The code official, in concurrence with approval from the building official and fire chief, is authorized to approve alternative materials or methods, provided that the code official finds that the proposed design, use or operation satisfactorily complies with the intent of this code and that the alternative is, for the purpose intended, at least equivalent to the level of quality, strength, effectiveness, fire resistance, durability and safety prescribed by this code. Approvals under the authority herein contained shall be subject to the approval of the building official whenever the alternate material or method involves matters regulated by the *International Building Code*.

The code official shall require that sufficient evidence or proof be submitted to substantiate any claims that may be made regarding its use. The details of any action granting approval of an alternate shall be recorded and entered in the files of the code enforcement agency

SECTION 104
APPEALS

104.1 General. To determine the suitability of alternative materials and methods and to provide for reasonable interpretations of the provisions of this code, there shall be and hereby is created a board of appeals consisting of five members who are qualified by experience and training to pass judgment on pertinent matters. The code official, building official and fire chief shall be ex officio members, and the code official shall act as secretary of the board. The board of appeals shall be appointed by the legislative body and shall hold office at their discretion. The board shall adopt reasonable rules and regulations for conducting its investigations and shall render decisions and findings in writing to the code official, with a duplicate copy to the applicant.

104.2 Limitations of authority. The board of appeals shall not have authority relative to interpretation of the administrative provisions of this code and shall not have authority to waive requirements of this code.

SECTION 105
PERMITS

105.1 General. When not otherwise provided in the requirements of the building or fire code, permits are required in accordance with Section 105.

105.2 Permits required. Unless otherwise exempted, no building or structure regulated by this code shall be erected, constructed, altered, repaired, moved, removed, converted or demolished unless a separate permit for each building or structure has first been obtained from the code official.

When required by the code official, a permit shall be obtained for the following activities, operations, practices or functions within an urban-wildland interface area:

1. Automobile wrecking yard.
2. Candles and open flames in assembly areas.
3. Explosives or blasting agents.
4. Fireworks.
5. Flammable or combustible liquids.
6. Hazardous materials.
7. Liquefied petroleum gases.
8. Lumberyards.
9. Motor vehicle fuel-dispensing stations.
10. Open burning.
11. Pyrotechnical special effects material.
12. Tents, canopies and temporary membrane structures.
13. Tire storage.
14. Welding and cutting operations.

105.3 Work exempt from permit. Unless otherwise provided in the requirements of the building or fire code, a permit shall not be required for the following:

1. One-story detached accessory buildings used as tool and storage sheds, playhouses and similar uses, provided the floor area does not exceed 120 square feet (11.15m^2) and the structure is located more than 50 feet (15 240 mm) from the nearest adjacent structure.
2. Fences not over 6 feet (1829 mm) high.

Exemption from the permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction.

The code official is authorized to stipulate conditions for permits. Permits shall not be issued when public safety would be at risk, as determined by the code official.

105.4 Permit application. To obtain a permit, the applicant shall first file an application therefore in writing on a form furnished by the code enforcement agency for that purpose. Every such application shall:

1. Identify and describe the work, activity, operation, practice or function to be covered by the permit for which application is made.
2. Describe the land on which the proposed work, activity, operation, practice or function is to be done by legal description, street address or similar description that will readily identify and definitely locate the proposed building, work, activity, operation, practice or function.
3. Indicate the use or occupancy for which the proposed work, activity, operation, practice or function is intended.
4. Be accompanied by plans, diagrams, computation and specifications and other data as required in Section 106 of this code.
5. State the valuation of any new building or structure or any addition, remodeling or alteration to an existing building.
6. Be signed by the applicant or the applicant's authorized agent.
7. Give such other data and information as may be required by the code official.

105.5 Permit approval. Before a permit is issued, the code official, or an authorized representative, shall review and approve all permitted uses, occupancies or structures. Where laws or regulations are enforceable by other agencies or departments, a joint approval shall be obtained from all agencies or departments concerned.

105.6 Permit issuance. The application, plans, specifications and other data filed by an applicant for a permit shall be reviewed by the code official. If the code official finds that the work described in an application for a permit and the plan, specifications and other data filed therewith conform to the requirements of this code, the code official is allowed to issue a permit to the applicant.

When the code official issues the permit, the code official shall endorse in writing or stamp the plans and specifications APPROVED. Such approved plans and specifications shall not be changed, modified or altered without authorization from the code official, and all work regulated by this code shall be done in accordance with the approved plans.

105.7 Validity of permit. The issuance or granting of a permit or approval of plans, specifications and computations shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or conceal the provisions of this code or other ordinances of the jurisdiction shall not be valid.

105.8 Expiration. Every permit issued by the code official under the provisions of this code shall expire by limitation and become null and void if the building, use or work authorized by such permit is not commenced within 180 days from the date of such permit, or if the building, use or work authorized by such permit is suspended or abandoned at any time after the work is commenced for a period of 180 days.

Any permittee holding an unexpired permit may apply for an extension of the time within which work may commence under that permit when the permittee is unable to commence work within the time required by this section for good and satisfactory reasons. The code official may extend the time for action by the permittee for a period not exceeding 180 days on written request by the permittee showing that circumstances beyond the control of the permittee have prevented action from being taken. No permit shall be extended more than once.

105.9 Retention of permits. Permits shall at all times be kept on the premises designated therein and shall at all times be subject to inspection by the code official or other authorized representative.

105.10 Revocation of permits. Permits issued under this code may be suspended or revoked when it is determined by the code official that:

1. It is used by a person other than the person to whom the permit was issued.
2. It is used for a location other than that for which the permit was issued.
3. Any of the conditions or limitations set forth in the permit have been violated.
4. The permittee fails, refuses or neglects to comply with any order or notice duly served on him under the provisions of this code within the time provided therein.
5. There has been any false statement or misrepresentation as to material fact in the application or plans on which the permit or application was made.
6. When the permit is issued in error or in violation of any other ordinance, regulations or provisions of this code.

The code official is allowed to, in writing, suspend or revoke a permit issued under the provisions of this code

whenever the permit is issued in error or on the basis of incorrect information supplied, or in violation of any ordinance or regulation or any of the provisions of this code.

SECTION 106
PLANS AND SPECIFICATIONS

106.1 General. Plans, engineering calculations, diagrams and other data shall be submitted in at least two sets with each application for a permit. When such plans are not prepared by an architect or engineer, the code official may require the applicant submitting such plans or other data to demonstrate that state law does not require that the plans be prepared by a licensed architect or engineer. The code official may require plans, computations and specifications to be prepared and designed by an architect or engineer licensed by the state to practice as such even if not required by state law.

> **Exception:** Submission of plans, calculations, construction inspection requirements and other data, if it is found that the nature of the work applied for is such that reviewing of plans is not necessary to obtain compliance with this code.

106.2 Information on plans and specifications. Plans and specifications shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in detail that it will conform to the provisions of this code and all relevant laws, ordinances, rules and regulations.

106.3 Site plan. In addition to the requirements for plans in the *International Building Code*, site plans shall include topography, width and percent of grade of access roads, landscape and vegetation details, locations of structures or building envelopes, existing or proposed overhead utilities, occupancy classification of buildings, types of ignition-resistant construction of buildings, structures and their appendages, roof classification of buildings, and site water supply systems.

106.4 Vegetation management plans. When utilized by the permit applicant pursuant to Section 402, vegetation management plans shall be prepared and shall be submitted to the code official for review and approval as part of the plans required for a permit. See Appendix A.

106.5 Fire protection plan. When required by the code official pursuant to Section 304, a fire protection plan shall be prepared and shall be submitted to the code official for review and approved as a part of the plans required for a permit.

106.6 Other data and substantiation. When required by the code official, the plans and specifications shall include classification of fuel loading, fuel model light, medium or heavy, and substantiating data to verify classification of fire-resistive vegetation.

106.7 Vicinity plan. In addition to the requirements for site plans, plans shall include details regarding the vicinity within 300 feet (91 440 mm) of property lines, including other structures, slope, vegetation, fuel breaks, water supply systems and access roads.

106.8 Retention of plans. One set of approved plans, specifications and computations shall be retained by the code official for a period of not less than 90 days from date of completion of the work covered therein; and one set of approved plans and specifications shall be returned to the applicant, and said set shall be kept on the site of the building, use or work at all times during which the work authorized thereby is in progress.

SECTION 107
INSPECTION AND ENFORCEMENT

107.1 Inspection.

107.1.1 General. All construction or work for which a permit is required by this code shall be subject to inspection by the code official and all such construction or work shall remain accessible and exposed for inspection purposes until approved by the code official.

It shall be the duty of the permit applicant to cause the work to remain accessible and exposed for inspection purposes. Neither the code official nor the jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid.

A survey of the lot may be required by the code official to verify that the mitigation features are provided and the building or structure is located in accordance with the approved plans.

107.1.2 Authority to inspect. The code official shall inspect, as often as necessary, buildings and premises, including such other hazards or appliances designated by the code official for the purpose of ascertaining and causing to be corrected any conditions that could reasonably be expected to cause fire or contribute to its spread, or any violation of the purpose of this code and of any other law or standard affecting fire safety.

107.1.3 Re-inspections. To determine compliance with this code, the code official may cause a structure to be re-inspected. A fee may be assessed for each inspection or re-inspection when such portion of work for which inspection is called is not complete or when corrections called for are not made.

Re-inspection fees may be assessed when the approved plans are not readily available to the inspector, for failure to provide access on the date for

which inspection is requested or for deviating from plans requiring the approval of the code official.

To obtain a re-inspection, the applicant shall pay the re-inspection fee as set forth in the fee schedule adopted by the jurisdiction. When re-inspection fees have been assessed, no additional inspection of the work will be performed until the required fees have been paid.

107.2 Enforcement.

107.2.1 Authorization to issue corrective orders and notices. When the code official finds any building or premises that are in violation of this code, the code official is authorized to issue corrective orders and notices.

107.2.2 Service of orders and notices. Orders and notices authorized or required by this code shall be given or served on the owner, operator, occupant or other person responsible for the condition or violation either by verbal notification, personal service, or delivering the same to, and leaving it with, a person of suitable age and discretion on the premises; or, if no such person is found on the premises, by affixing a copy thereof in a conspicuous place on the door to the entrance of said premises and by mailing a copy thereof to such person by registered or certified mail to the person's last known address.

Orders or notices that are given verbally shall be confirmed by service in writing as herein provided.

107.3 Right of entry. Whenever necessary to make an inspection to enforce any of the provisions of this code, or whenever the code official has reasonable cause to believe that there exists in any building or on any premises any condition that makes such building or premises unsafe, the code official is authorized to enter such building or premises at all reasonable times to inspect the same or to perform any duty authorized by this code, provided that if such building or premises is occupied, the code official shall first present proper credentials and request entry; and if such building or premises is unoccupied, the code official shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or premises and request entry.

If such entry is refused, the code official shall have recourse to every remedy provided by law to secure entry. Owners, occupants or any other persons having charge, care or control of any building or premises, shall, after proper request is made as herein provided, promptly permit entry therein by the code official for the purpose of inspection and examination pursuant to this code.

107.4 Compliance with orders and notices.

107.4.1 General compliance. Orders and notices issued or served as provided by this code shall be complied with by the owner, operator, occupant or other person responsible for the condition or violation to which the corrective order or notice pertains.

If the building or premises is not occupied, such corrective orders or notices shall be complied with by the owner.

107.4.2 Compliance with tags. A building or premises shall not be used when in violation of this code as noted on a tag affixed in accordance with Section 107.4.1.

107.4.3 Removal and destruction of signs and tags. A sign or tag posted or affixed by the code official shall not be mutilated, destroyed or removed without authorization by the code official.

107.4.4 Citations. Persons operating or maintaining an occupancy, premises or vehicle subject to this code who allow a hazard to exist or fail to take immediate action to abate a hazard on such occupancy, premises or vehicle when ordered or notified to do so by the code official shall be guilty of a misdemeanor.

107.4.5 Unsafe conditions. Buildings, structures or premises that constitute a fire hazard or are otherwise dangerous to human life, or which in relation to existing use constitute a hazard to safety or health or public welfare, by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster damage or abandonment as specified in this code or any other ordinance, are unsafe conditions. Unsafe buildings or structures shall not be used. Unsafe buildings are hereby declared to be public nuisances and shall be abated by repair, rehabilitation, demolition or removal, pursuant to applicable state and local laws and codes.

SECTION 108
CERTIFICATE OF COMPLETION

No building, structure or premises shall be used or occupied, and no change in the existing occupancy classification of a building, structure, premise or portion thereof shall be made until the code official has issued a certificate of completion therefore as provided herein. The certificate of occupancy shall not be issued until the certificate of completion indicating that the project is in compliance with this code has been issued by the code official.

Issuance of a certificate of occupancy shall not be construed as an approval of a violation of the provisions of this code or of other pertinent laws and ordinances of the jurisdiction. Certificates presuming to give authority to violate or cancel the provisions of this code or other laws or ordinances of the jurisdiction shall not be valid.

CHAPTER 2

URBAN-WILDLAND INTERFACE AREAS

SECTION 201
URBAN-WILDLAND INTERFACE AREA DESIGNATIONS

201.1 Mapping. The urban-wildland interface areas shall be recorded on maps and filed with the clerk of the jurisdiction. These areas shall become effective immediately thereafter

201.2 Review of urban-wildland interface areas. The code official shall reevaluate and recommend modification to the urban-wildland interface areas in accordance with Section 201 on a three-year basis or more frequently as deemed necessary by the legislative body.

CHAPTER 3

URBAN-WILDLAND INTERFACE AREA REQUIREMENTS

SECTION 301
ACCESS

301.1 Restricted access. Where emergency vehicle access is restricted because of secured access roads or driveways or where immediate access is necessary for life-saving or fire-fighting purposes, the code official is authorized to require a key box to be installed in an accessible location. The key box shall be of a type approved by the code official and shall contain keys to gain necessary access as required by the code official.

301.2 Driveways. Driveways shall be provided when any portion of an exterior wall of the first story of a building is located more than 150 feet (45 720 mm) from a fire apparatus access road. Driveways shall provide a minimum unobstructed width of 12 feet (3658 mm) and a minimum unobstructed height of 13 feet 6 inches (4115 mm). Driveways in excess of 150 feet (45 720 mm) in length shall be provided with turnarounds. Driveways in excess of 200 feet (60 960 mm) in length and less than 20 feet (6096 mm) in width shall be provided with turnouts in addition to turnarounds.

A driveway shall not serve in excess of five dwelling units.

Driveway turnarounds shall have inside turning radii of not less than 30 feet (9144 mm) and outside turning radii of not less than 45 feet (13 716 mm). Driveways that connect with a road or roads at more than one point may be considered as having a turnaround if all changes of direction meet the radii requirements for driveway turnarounds. Driveway turnouts shall be an all-weather road surface at least 10 feet (3048 mm) wide and 30 feet (9144 mm) long. Driveway turnouts shall be located as required by the code official. Vehicle load limits shall be posted at both entrances to bridges on driveways and private roads. Design loads for bridges shall be established by the code official.

301.3 Fire apparatus access road. When required, fire apparatus access roads shall be all-weather roads with a minimum width of 20 feet (6096 mm) and a clear height of 13 feet 6 inches (4115 mm); shall be designed to accommodate the loads and turning radii for fire apparatus; and have a gradient negotiable by the specific fire apparatus normally used at that location within the jurisdiction. Dead-end roads in excess of 150 feet (45 720 mm) in length shall be provided with turnarounds as approved by the code official. An all-weather road surface shall be any surface material acceptable to the code official that would normally allow the passage of emergency service vehicles to protect structures and wildlands within the jurisdiction.

301.4 Marking of roads. Approved signs or other approved notices shall be provided and maintained for access roads and driveways to identify such roads and prohibit the obstruction thereof or both.

All road identification signs and supports shall be of non-combustible materials. Signs shall have minimum 4-inch-high (102 mm) reflective letters with ½ inch (12.7 mm) stroke on a contrasting 6-inch-high (152 mm) sign. Road identification signage shall be mounted at a height of 7 feet (2134 mm) from the road surface to the bottom of the sign.

301.5 Marking of fire protection equipment. Fire protection equipment and fire hydrants shall be clearly identified in a manner approved by the code official to prevent obstruction.

301.6 Address markers. All buildings shall have a permanently posted address, which shall be placed at each driveway entrance and be visible from both directions of travel along the road. In all cases, the address shall be posted at the beginning of construction and shall be maintained thereafter, and the address shall be visible and legible from the road on which the address is located.

Address signs along one-way roads shall be visible from both the intended direction of travel and the opposite direction.

Where multiple addresses are required at a single driveway, they shall be mounted on a single post, and additional signs shall be posted at locations where driveways divide.

Where a roadway provides access solely to a single commercial or industrial business, the address sign shall be placed at the nearest road intersection providing access to that site.

All road identification signs and supports shall be of non-combustible materials. Signs shall have minimum 4-inch-high (102 mm) reflective letters with ½ inch (12.7 mm) stroke on a contrasting 6-inch-high (152 mm) sign. Road identification signage shall be mounted at a height of 7 feet (2134 mm) from the road surface to the bottom of the sign.

301.7 Grade. The gradient for fire apparatus access roads and driveways shall not exceed the maximum approved by the code official. It will be up to code official to ascertain the standard based on local fire equipment, grade not to exceed 12%.

SECTION 302
WATER SUPPLY

302.1 General. When provided in order to qualify as a conforming water supply for the purpose of Table 403.1, an approved water source shall have an adequate water supply for the use of the fire protection service to protect buildings and structures from exterior fire sources or to suppress

structure fires within the urban-wildland interface area of the jurisdiction in accordance with this section.

302.2 Water sources. The point at which a water source is available for use shall be located not more than 1,000 feet (305 m) from the building and be approved by the code official. The distance shall be measured along an unobstructed line of travel.

Water sources shall comply with the following:

1. Man-made water sources shall have a minimum usable water volume as determined by the adequate water supply needs in accordance with Section 302.5. This water source shall be equipped with an approved hydrant. The water level of the water source shall be maintained by rainfall, water pumped from a well, cistern, water hauled by a tanker, or by seasonal highwater of a stream or river. The design, construction, location, water level maintenance, access, and access maintenance of man-made water sources shall be approved by the code official.

2. Natural water sources shall have a minimum annual water level or flow sufficient to meet the adequate water supply needs in accordance with Section 302.5. This water level or flow shall not be rendered unusable because of freezing. This water source shall have an approved draft site with an approved hydrant. Adequate water flow and rights for access to the water source shall be ensured in a form acceptable to the code official.

302.3 Draft sites. Approved draft sites shall be provided at all natural water sources intended for use as fire protection for compliance with this code. The design, construction, location, access and access maintenance of draft sites shall be approved by the code official.

The pumper access point shall be either an emergency vehicle access area alongside a conforming access road or an approved driveway no longer than 150 feet (45 720 mm). Pumper access points and access driveways shall be designed and constructed in accordance with all codes and ordinances enforced by this jurisdiction. Pumper access points shall not require the pumper apparatus to obstruct a road or driveway.

302.4 Hydrants. All hydrants shall be designed and constructed in accordance with nationally recognized standards. The location and access shall be approved by the code official.

302.5 Adequate water supply. Adequate water supply and delivery shall be determined for purposes of initial attack and flame front control as determined by the local jurisdiction. NFPA 1142 may be used as a reference.

302.6 The water system required by this code can only be considered conforming for purposes of determining the level of ignition-resistant construction (see Chapter 4).

302.7 Obstructions. Access to all water sources required by this code shall be unobstructed at all times. The code official shall not be deterred or hindered from gaining immediate access to water source equipment, fire protection equipment or hydrants.

302.8 Identification. Water sources, draft sites, hydrants and fire protection equipment shall be clearly identified in a manner approved by the code official to identify location and to prevent obstruction by parking and other obstructions.

302.9 Testing and maintenance. Water sources, draft sites, hydrants and other fire protection equipment required by this code shall be subject to periodic tests as required by the code official. Code official shall establish a periodic testing schedule. **Costs are to be covered by the water provider.**

All such equipment installed under the provisions of this code shall be maintained in an operative condition at all times and shall be repaired or replaced where defective. Additions, repairs, alterations and servicing of such fire protection equipment and resources shall be in accordance with approved standards. Mains and appurtenances shall be installed in accordance with NFPA 24. Water tanks for private fire protection shall be installed in accordance with NFPA 22. Costs are to be covered by the water provider.

302.10 Reliability.

302.10.1 Objective. The objective of this section is to increase the reliability of water supplies by reducing the exposure of vegetative fuels to electrically powered systems.

302.10.2 Clearance of fuel. Defensible space shall be provided around water tank structures, water supply pumps and pump houses in accordance with Section 502.

302.10.3 Standby power. Stationary water supply facilities within the urban-wildland interface area dependent on electrical power powered by power grid to meet adequate water supply demands shall provide functional standby power systems in accordance with the ICC *Electrical Code* to ensure that an uninterrupted water supply is maintained. The standby power source shall be capable of providing power for a minimum of two hours.

When approved by the code official, a standby power supply is not required where the primary power service to the stationary water supply facility is underground or onsite generator.

SECTION 303
FIRE PROTECTION PLAN

The purpose of the plan is to provide a basis to determine overall compliance with this code, for determination of Ignition-Resistant Construction (see Section 403.1) and for determining the need for alterative materials and methods.

303.1 General. When required by the code official, a fire protection plan shall be prepared.

303.2 Content. The plan shall be based upon a site-specific wildfire risk assessment that includes considerations of location, topography, aspect, flammable vegetation, climatic conditions and fire history. The plan shall address water supply, access, building ignition and fire-resistance factors, fire protection systems and equipment, defensible space and vegetation management.

303.3 Cost. The cost of fire protection plan preparation and review shall be the responsibility of the applicant.

303.4 Plan retention. The fire protection plan shall be retained by the code official.

CHAPTER 4

SPECIAL BUILDING CONSTRUCTION REGULATIONS

SECTION 401
GENERAL

401.1 Scope. Buildings and structures shall be constructed in accordance with the *International Building Code* and this code.

Exceptions:

1. Accessory structures not exceeding 120 square feet (11 m^2) in floor area when located at least 50 feet (15 240 mm) from buildings containing habitable spaces.
2. Agricultural buildings at least 50 feet (15 240 mm) from buildings containing habitable spaces.

401.2 Objective. The objective of this chapter is to establish minimum standards to locate, design and construct buildings and structures or portions thereof for the protection of life and property, to resist damage from wildfires, and to mitigate building and structure fires from spreading to wildland fuels. The minimum standards set forth in this chapter vary with the critical fire weather, slope and fuel type to provide increased protection, above the requirements set forth in the *International Building Code*, from the various levels of hazards.

SECTION 402
FIRE HAZARD SEVERITY

The fire hazard severity of building sites for all buildings hereafter constructed, modified or relocated into urban-wildland interface areas shall be established in accordance with Appendix B. The fire hazard severity is allowed to be reduced by implementing a vegetation management plan in accordance with Appendix A.

SECTION 403
IGNITION-RESISTANT CONSTRUCTION

403.1 General. Buildings and structures hereafter constructed, modified or relocated into or within urban-wildland interface areas shall meet the construction requirements in accordance with Table 403.1. Class 1, Class 2 or Class 3 ignition-resistant construction shall be in accordance with Sections 404, 405 and 406, respectively.

SECTION 404
CLASS 1 IGNITION-RESISTANT CONSTRUCTION

404.1 General. Class 1 ignition-resistant construction shall be in accordance with Section 404.

TABLE 403.1
Ignition-Resistant Construction [a]

	FIRE HAZARD SEVERITY					
	Moderate Hazard		High Hazard		Extreme Hazard	
	Water Supply [b]		Water Supply [b]		Water Supply [b]	
Defensible Space [c]	Conforming [d]	Nonconforming [e]	Conforming [d]	Nonconforming [e]	Conforming [d]	Nonconforming [e]
Nonconforming	IR 2	IR 1	IR 1	IR 1 / N.C.	IR 1 / N.C.	Not permitted
Conforming	IR 3	IR 2	IR 2	IR 1	IR 1	IR 1 / N.C.
1.5 x Conforming	Not required	IR 3	IR 3	IR 2	IR 2	IR 1

a. Access shall be in accordance with Section 301.
b. Subdivisions shall have a conforming water supply in accordance with Section 302.
IR1 = Ignition-resistant construction in accordance with Section 404
IR2 = Ignition-resistant construction in accordance with Section 405
IR3 = Ignition-resistant construction in accordance with Section 406
N.C. = Exterior walls shall have a fire-resistance rating of not less than 1-hour and the exterior surfaces of such walls shall be noncombustible. Usage of log wall construction is allowed.
c. Conformance based on Section 502.
d. Conformance based on Section 302.
e. A nonconforming water supply is any water system or source that does not comply with Section 302, including situations where there is no water supply for structure protection or fire suppression.

404.2 Roof covering. Roofs shall have a Class A roof covering or a Class A roof assembly. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire stopped to preclude entry of flames or embers.

404.3 Protection of eaves. Eaves and soffits shall be protected on the exposed underside by materials approved for a minimum of 1-hour fire-resistance-rated construction. Fascias are required and must be protected on the backside by materials approved for a minimum of 1-hour fire-resistance-rated construction or 2-inch (51 mm) nominal dimension lumber.

404.4 Gutters and downspouts. Gutters and downspouts shall be constructed of noncombustible material.

404.5 Exterior walls. Exterior walls of buildings or structures shall be constructed with materials approved for a minimum of 1-hour fire-resistance-rated construction on the exterior side or constructed with approved noncombustible materials.

> **Exception:** Heavy timber or log wall construction. Such material shall extend from the top of the foundation to the underside of the roof sheathing.

404.6 Unenclosed underfloor protection. Buildings or structures shall have all underfloor areas enclosed to the ground with exterior walls in accordance with Section 404.5.

> **Exception:** Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction.

404.7 Appendages and projections. Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be a minimum of 1-hour fire-resistance-rated construction, heavy timber construction or constructed of approved noncombustible materials.

When the attached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6inches (152 mm) of the ground, with exterior wall construction in accordance with Section 404.5.

404.8 Exterior glazing. Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multi-layered glazed panels, glass block or have a fire protection rating of not less than 20 minutes.

404.9 Exterior doors. Exterior doors shall be approved non-combustible construction, solid core wood not less than 1 3/4 inches thick (45 mm), or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with Section 404.8.

404.10 Vents. Attic ventilation openings, foundation or underfloor vents, or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches (0.0929 m^2) each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/4 inch (6.4 mm).

Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located at least 10 feet (3048 mm) from property lines. Underfloor ventilation openings shall be located as close to grade as practical.

404.11 Detached accessory structures. Detached accessory structures located less than 50 feet (15 240 mm) from a building containing habitable space shall have exterior walls constructed with materials approved for a minimum of 1-hour fire-resistance-rated construction, heavy timber, log wall construction or constructed with approved non-combustible materials on the exterior side.

SECTION 405
CLASS 2 IGNITION-RESISTANT CONSTRUCTION

405.1 General. Class 2 ignition-resistant construction shall be in accordance with Section 405.

405.2 Roof covering. Roofs shall have at least a Class A roof covering, Class B roof assembly or an approved noncombustible roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire stopped to preclude entry of flames or embers.

405.3 Protection of eaves. Combustible eaves, fascias and soffits shall be enclosed with solid materials with a minimum thickness of 3/4 inch (19 mm). No exposed rafter tails shall be permitted unless constructed of heavy timber materials.

405.4 Gutters and downspouts. Gutters and downspouts shall be constructed of noncombustible material.

405.5 Exterior walls. Exterior walls of buildings or structures shall be constructed with materials approved for a minimum of 1-hour fire-resistance-rated construction on the exterior side or constructed with approved noncombustible materials.

> **Exception:** Heavy timber or log wall construction.

Such material shall extend from the top of the foundation to the underside of the roof sheathing.

405.6 Unenclosed underfloor protection. Buildings or structures shall have all underfloor areas enclosed to the ground, with exterior walls in accordance with Section 405.5.

Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction.

405.7 Appendages and projections. Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be a minimum of 1-hour fire-resistance-rated construction, heavy timber construction or constructed with approved noncombustible materials.

When the attachment is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 405.5.

405.8 Exterior glazing. Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multi-layered glazed panels, glass block or have a fire-protection rating of not less than 20 minutes.

405.9 Exterior doors. Exterior doors shall be approved non-combustible construction, solid core wood not less than 1 3/4 inches thick (45 mm), or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with Section 405.8.

405.10 Vents. Attic ventilation openings, foundation or underfloor vents or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches (0.0929 m^2) each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/4 inch (6.4 mm).

Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located at least 10 feet (3048 mm) from property lines. Underfloor ventilation openings shall be located as close to grade as practical.

405.11 Detached accessory structures. Detached accessory structures located less than 50 feet (15 240 mm) from a building containing habitable space shall have exterior walls constructed with materials approved for a minimum of 1-hour fire-resistance-rated construction, heavy timber, log wall construction, or constructed with approved noncombustible material on the exterior side.

When the detached structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have all underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 405.5 or underfloor protection in accordance with Section 405.6.

Exception: The enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction.

See Section 405.2 for roof requirements.

SECTION 406
CLASS 3 IGNITION-RESISTANT CONSTRUCTION

406.1 General. Class 3 ignition-resistant construction shall be in accordance with Section 406.

406.2 Roof covering. Roofs shall have at least a Class A roof covering, Class C roof assembly or an approved noncombustible roof covering. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be fire stopped to preclude entry of flames or embers.

406.3 Unenclosed underfloor protection. Buildings or structures shall have all underfloor areas enclosed to the ground with exterior walls.

Exception: Complete enclosure may be omitted where the underside of all exposed floors and all exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction.

406.4 Vents. Attic ventilation openings, soffit vents, foundation or underfloor vents or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches (0.0929 m^2) each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/4 inch (6.4 mm).

SECTION 407
REPLACEMENT OR REPAIR OF ROOF COVERINGS

The roof covering on buildings or structures in existence prior to the adoption of this code that are replaced or have 25 percent or more replaced in a 12-month period shall be replaced with a roof covering required for new construction based on the type of ignition-resistant construction specified in accordance with Section 403.

CHAPTER 5

FIRE PROTECTION REQUIREMENTS

SECTION 501
GENERAL

501.1 Scope. The provisions of this chapter establish general requirements for new and existing buildings, structures and premises located within urban-wildland interface areas.

501.2 Objective. The objective of this chapter is to establish minimum requirements to mitigate the risk to life and property from wildland fire exposures, exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels.

SECTION 502
DEFENSIBLE SPACE

502.1 Objective. Provisions of this section are intended to modify the fuel load in areas adjacent to structures to create a defensible space.

502.2 Fuel modification. In order to qualify as a conforming defensible space, fuel modification shall be provided within a distance from buildings or structures as specified in Table 502.2. For all other purposes, the fuel modification distance shall not be less than 10 feet (30 489mm) or to the property line, whichever is less. Distances specified in Table 502.2 shall be measured along the grade from the perimeter or projection of the building or structure as shown in Figure 502.2. Distances specified in Table 502.2 may be increased by the code official because of a site-specific analysis based on local conditions and the fire protection plan.

Persons owning, leasing, controlling, operating or maintaining buildings or structures requiring defensible spaces are responsible for modifying or removing non fire-resistive vegetation on the property owned, leased or controlled by said person.

Trees and/or small clumps of trees/brush are allowed within the defensible space, provided the horizontal distance between crowns of adjacent trees/brush and structures, overhead electrical facilities or unmodified fuel is not less than 10 feet (3048 mm). Deadwood and litter shall be regularly removed from trees.

Where ornamental vegetative fuels or cultivated ground cover, such as green grass, ivy, succulents or similar plants are used as ground cover, they are allowed to be within the designated defensible space, provided they do not form a means of transmitting fire from the native growth to any structure.

TABLE 502.2
Required Defensible Space

Urban-Wildland Interface Area	Fuel Modification Distance (feet)
Moderate hazard	30
High hazard	50
Extreme hazard	100

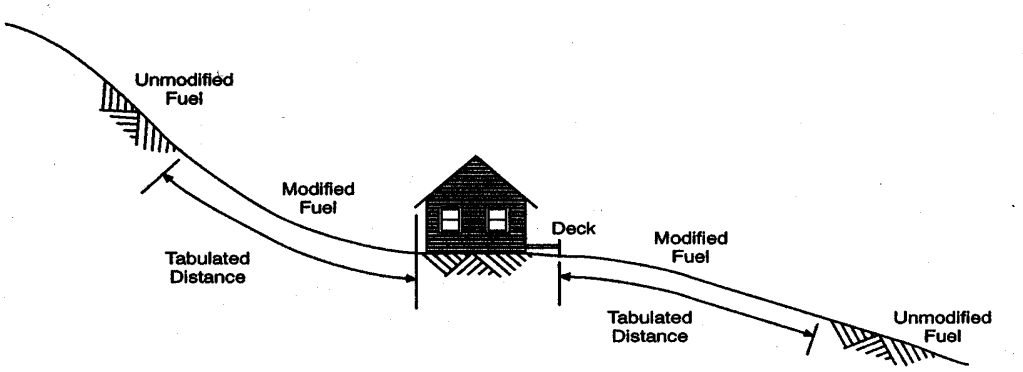

FIGURE 502.2
Measurements of Fuel Modification Distance

SECTION 503
MAINTENANCE OF DEFENSIBLE SPACE

503.1 General. Defensible spaces required by Section 502 shall be maintained in accordance with Section 503.

503.2 Modified area. Non fire-resistive vegetation or growth shall be kept clear of buildings or structures, in accordance with Section 502, in such a manner as to provide a clear area for fire suppression operations.

503.3 Responsibility. Persons owning, leasing, controlling, operating or maintaining buildings or structures are responsible for maintenance of defensible spaces. Maintenance of the defensible space shall include modifying or removing non-fire-resistive vegetation and keeping leaves, needles and other dead vegetative material regularly removed from roofs of buildings and structures.

503.4 Trees. Individual tree and/or small clumps of trees or brush crowns extending to within 10 feet (3048 mm) of any structure shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm). Tree crowns within the defensible space shall be pruned to remove limbs located less than 6 feet (1829mm) above the ground surface adjacent to the trees.

Portions of tree crowns that extend within 10 feet (3048 mm) of the outlet of a chimney shall be pruned to maintain a minimum horizontal clearance of 10 feet (3048 mm). Deadwood and litter shall be regularly removed from trees.

SECTION 504
SPARK ARRESTERS

Chimneys serving fireplaces, barbecues, incinerators or decorative heating appliances in which solid or liquid fuel is used, shall be provided with a spark arrester. Spark arresters shall be constructed of woven or welded wire screening of 12 USA standard gage wire (0.1046 inch) (2.66 mm) having openings not exceeding 1/2 inch (12.7 mm). The net free area of the spark arrester shall not be less than four times the net free area of the outlet of the chimney.

SECTION 505
LIQUEFIED PETROLEUM GAS INSTALLATIONS

505.1 General. The storage of LP-gas and the installation and maintenance of pertinent equipment shall be in accordance with the *International Fire Code* or, in the absence thereof, recognized standards.

505.2 Location of containers. LP-gas containers shall be located within the defensible space in accordance with the *International Fire Code*.

SECTION 506
STORAGE OF FIREWOOD AND COMBUSTIBLE MATERIALS

Firewood and combustible material shall not be stored in unenclosed spaces beneath buildings or structures, or on decks or under eaves, canopies or other projections or overhangs. When required by the code official, storage of firewood and combustible material stored in the defensible space shall be located a minimum of 30 feet (6096 mm) from structures and separated from the crown of trees by a minimum horizontal distance of 15 feet (4572 mm).

Firewood and combustible materials not for consumption on the premises shall be stored so as to not pose a hazard.

APPENDIX A

VEGETATION MANAGEMENT PLAN

Vegetation management plans shall be submitted to the code official for review and approval as part of the plans required for a permit. Vegetation management plans shall describe all actions that will be taken to prevent a fire from being carried toward or away from the building. A vegetation management plan shall include at least the following information:

1. A copy of the site plan.
2. Methods and timetables for controlling, changing or modifying areas on the property. Elements of the plan shall include removal of slash, snags, vegetation that may grow into overhead electrical lines, other ground fuels, ladder fuels and dead trees, and the thinning of live trees.
3. A plan for maintaining the proposed fuel-reduction measures.

To be considered a fuel modification for purposes of this code, continuous maintenance of the clearance is required.

APPENDIX B

FIRE HAZARD SEVERITY FORM

This appendix is to be used to determine the fire hazard severity.

A. Subdivision Design

1. Ingress/Egress

Two or more primary roads	1	____
One road	10	____
One-lane road in, one-lane road out	15	____

2. Width of Primary Road

20 feet or more	1	____
Less than 20 feet	5	____

3. Accessibility

Road grade 5% or less	1	____
Road grade 5-10%	5	____
Road grade greater than 10%	10	____

4. Secondary Road Terminus

Loop road, cul-de-sac with outside turning radius of 45 feet or greater	1	____
Cul-de-sac turnaround	5	____
Dead-end road 200 feet or less in length	8	____
Dead-end roads greater than 200 feet in length	10	____

5. Street Signs

Present, but unapproved	3	____
Not present	5	____

B. Vegetation (IUWIC Definition)

1. Fuel Type

Surface

Lawn/noncombustible	1	____
Grass/short brush	5	____
Scattered dead/down woody material	10	____
Abundant dead/down woody material	15	____

Overstory (see Appendix D for definitions)

Deciduous trees (except tall brush)	3	____
Mixed deciduous trees and tall brush	10	____
Clumped/scattered conifers and/or tall brush	15	____
Contiguous Conifer and/or tall brush	20	____

2. Defensible Space

(Individual lots within the subdivision)

70% or more of lots completed	1	____
30% to 70% of lots completed	10	____
Less than 30% of lots completed	20	____

C. Topography / Location

Located on flat, base of hill or set back at crest of hill	1	____
On slope with 0-20% grade	5	____
On slope with 21-30% grade	10	____
On slope with 31% grade or greater	15	____
At crest of hill with unmitigated vegetation below	20	____

D. Fire Protection - Water Source

500 GPM hydrant within 1,000 feet	1	____
Hydrant farther than 1,000 feet or draft site	5	____
Water source 20 min. or less, round trip	10	____
Water source between 20 min. to 45 min. away, round trip	15	____
Water source farther than 45 min., rd.trip	20	____

E. Existing Building Construction Materials

1. Roofing Materials

Class A Fire Rated	1	____
Class B Fire Rated	5	____
Class C Fire Rated	10	____
Non-rated	20	____

2. Siding & Decking

Noncombustible siding/decking	1	____
Combustible siding/no deck	5	____
Noncombustible siding/combustible deck	10	____
Combustible siding & deck	15	____

F. Utilities (gas and/or electric)

All underground utilities	1	____
One underground, one above ground	3	____
All aboveground	5	____

TOTAL FOR SUBDIVISION & BUILDING SITE _____

Moderate Hazard	50 – 75
High Hazard	76 – 100
Extreme Hazard	101 +

DATE OF ASSESSMENT (mm/dd/yy): _____

APPENDIX C

UTAH FIRE RESISTIVE SPECIES

Adapted from "Utah Forest Facts: Firewise Plants for Utah Landscapes"
Utah State University Extension, 2002

Grasses
Agropyron cristatum (Crested Wheatgrass)
Agropyron smithii (Western Wheatgrass)
Buchloe dactyloides (Buffalograss)
Dactylis glomerata (Orchardgrass)
Festuca cinerea and other species (Blue Fescue)
Lolium species (Rye Grass)
Poa pratensis (Kentucky Bluegrass)
Poa secunda (Sandberg Bluegrass)

Herbaceous Perennials
Achillea clavennae (Silvery Yarrow)
Achillea filipendulina (Fernleaf Yarrow)
Achillea - other species & hybrids (Yarrow)*
Aquilegia - species & hybrids (Columbine)
Armeria maritime (Sea Pink, Sea Thrift)
Artemisia stelleriana (Beach Wormwood, Dusty Miller)
Artemisia - other species & hybrids (Various names)*
Bergenia – species & hybrids (Bergenia)
Centranthus rubber (Red Valerian, Jupiter's Beard)
Cerastium tomentosum (Snow-in-summer)
Coreopsis auriculata var. *Nana* (Dwarf Mouse Ear Coreopsis)
Coreopsis – other perennial species (Coreopsis)
Delosperma nubigenum (Hardy Ice Plant)
Dianthus plumarius & others (Pinks)
Erigeron hybrids (Fleabane)*
Gaillardia X grandiflora (Blanket Flower)
Geranium cinereum (Hardy Geranium)
Geranium sanguineum (Bloody Cranesbill, Bloodred Geranium)
Geranium species (Geranium)
Hemerocallis species (Daylily)
Heuchera sanguinea (Coral Bells, Alum Root)
Iberis sempervirens (Evergreen Candytuft)
Iris species & hybrids (Iris)
Kniphofia species & hybrids (Red-hot Poker)
Lavandula species (Lavender)
Leucanthemum X superbum (Shasta Daisy)
Limonium latifolium (Sea-lavender, Statice)
Linum species (Flax)
Liriope spicata (Lily-turf)
Lupinus species & hybrids (Lupine)*
Medicago sativus (Alfalfa)
Oenothera species (Primrose)
Papaver species (Poppy)
Penstemon species & hybrids (Penstemon)
Perovskia atriplicifolia (Russian Sage, Azure Sage)
Potentilla nepalensis (Nepal Cinquefoil)
Potentilla tridentata (Wineleaf Cinquefoil)
Potentilla verna (tabernaemontani) (Spring Cinquefoil; Creeping Potentilla)
Potentilla – other non-shrubby species & hybrids (Cinquefoil, Potentilla)*
Salvia species & hybrids (Salvia, Sage)*
Sedum species (Stonecrop, Sedum)
Sempervivum tectorum (Hen and Chicks)
Stachys byzantina (Lamb's Ear)
Yucca filamentosa (Yucca)

Shrubs and Woody Vines
Atriplex species (Saltbush)
Ceanothus americanus (New Jersey Tea)
Ceanothus ovatus & others (Ceanothus)
Cistus species (Rock-rose)
Cotoneaster dammeri (Bearberry Cotoneaster)
Cotoneaster horizontalis (Rockspray or Rock Cotoneaster)
Cotoneaster – other compact species (Cotoneaster)
Hedera helix (English Ivy)
Lonicera species & hybrids (Honeysuckle)
Mahonia repens (Creeping Oregon Grape)
Parthenocissus quinquefolia (Virginia Creeper)
Prunus besseyi (Sand Cherry)
Purshia tridentata (Bitterbrush, Antelope Bitterbrush)
Pyracantha species (Firethorn, Pyracantha)
Rhamnus species (Buckthorn)
Rhus trilobata (Skunkbush Sumac)
Rhus – other species (Sumac)
Ribes species (Currant, Gooseberry)
Rosa rugosa & other hedge roses (Rugosa Rose)
Shepherdia canadensis (Russet Buffaloberry)
Syringa vulgare (Lilac)
Vinca major (Large Periwinkle)
Vinca minor (Dwarf Periwinkle, Common Periwinkle)

Trees
Acer species (Maple)
Betula species (Birch)
Cercis canadensis (Eastern Redbud)
Populus tremuloides (Quaking Aspen)
Populus – other species (Poplar, Cottonwood)
Salix species (Willow)

* Plants or groups of plants marked with an asterisk (*) can become weedy in certain circumstances, and may even be noxious weeds with legal restrictions against their planting and cultivation. Check with your local Extension office or State Department of Agriculture for information on noxious weeds in your area.

Note: Some of the listed plants may not be considered "water-wise" or drought-tolerant for arid climates.

APPENDIX D

DEFINITIONS

Scope. Unless otherwise expressly stated, the following words and terms shall, for the purposes of this code, have the meanings shown in this chapter.

Interchangeability. Words stated in the present tense include the future; words stated in the masculine gender include the feminine and neuter, and the singular number includes the plural and the plural the singular.

Terms defined in other codes. Where terms are not defined in this code and are defined in other international codes, such terms shall have the meanings ascribed to them as in those codes.

Terms not defined. Where terms are not defined through the methods authorized by this section, such terms shall have their ordinarily accepted meanings such as the context implies.

DEFINITIONS

ACCESSORY STRUCTURE. A building or structure used to shelter or support any material, equipment, chattel or occupancy other than a habitable building.

APPROVED. Approval by the code official as the result of review, investigation or tests conducted by the code official or by reason of accepted principles or tests by national authorities, or technical or scientific organizations.

BUILDING. Any structure used or intended for supporting or sheltering any use or occupancy.

BUILDING OFFICIAL. The officer or other designated authority charged with the administration and enforcement of the *International Building Code,* or the building official's duly authorized representative.

CERTIFICATE OF COMPLETION. Written documentation that the project or work for which a permit was issued has been completed in conformance with requirements of this code.

CODE OFFICIAL. The official designated by the jurisdiction to interpret and enforce this code, or the code official's authorized representative.

DEFENSIBLE SPACE. An area either natural or man-made, where material capable of allowing a fire to spread unchecked has been treated, cleared or modified to slow the rate and intensity of an advancing wildfire and to create an area for fire suppression operations to occur.

DRIVEWAY. A vehicular ingress and egress route that serves no more than two buildings or structures, not including accessory structures, or more than five dwelling units.

FIRE AREA. The floor area, in square feet (square meters), used to determine the adequate water supply.

FIRE CHIEF. The chief officer or the chief officer's authorized representative of the fire department serving the jurisdiction.

FIRE PROTECTION PLAN. A document prepared for a specific project or development proposed for the urban-wildland interface area. It describes ways to minimize and mitigate the fire problems created by the project or development, with the purpose of reducing impact on the community's fire protection delivery system.

FIRE WEATHER. Weather conditions favorable to the ignition and rapid spread of fire. In wildfires, this generally includes high temperatures combined with strong winds and low humidity.

FIRE-RESISTANCE-RATED CONSTRUCTION. The use of materials and systems in the design and construction of a building or structure to safeguard against the spread of fire within a building or structure and the spread of fire to or from buildings or structures to the urban-wildland interface area.

FLAME SPREAD RATING. As used herein refers to rating obtained according to tests conducted as specified by a nationally recognized standard.

FUEL BREAK. An area, strategically located for fighting anticipated fires, where the native vegetation has been permanently modified or replaced so that fires burning into it can be more easily controlled. Fuel breaks divide fire-prone areas into smaller areas for easier fire control and to provide access for fire fighting.

FUEL, HEAVY. Vegetation consisting of round wood 3 inches (76 mm) or larger in diameter. The amount of fuel (vegetation) would be 6 tons per acre or greater.

FUEL, LIGHT. Vegetation consisting of herbaceous plants and round wood less than ¼ inch (6.4 mm) in diameter. The amount of fuel (vegetation) would ½ ton to 2 tons per acre.

FUEL, MEDIUM. Vegetation consisting of round wood ¼ inch to 3 inches (6.4 mm to 76 mm) in diameter. The amount of fuel (vegetation) would be 2 to 6 tons per acre.

FUEL MODIFICATION. A method of modifying fuel load by reducing the amount of non-fire-resistive vegetation or altering the type of vegetation to reduce the fuel load.

FUEL MOSAIC. A fuel modification system that provides for the creation of islands and irregular boundaries to reduce the visual and ecological impact of fuel modification.

FUEL-LOADING. The oven-dry weight of fuels in a given area, usually expressed in pounds per acre (lb/a) (kg/ha). Fuel loading may be referenced to fuel size or time lag categories, and may include surface fuels or total fuels.

GREENBELT. A fuel break designated for a use other than fire protection.

HAZARDOUS MATERIALS. As defined in the *International Fire Code*.

HEAVY TIMBER CONSTRUCTION. As described in the *International Building Code*.

INSURANCE SERVICES OFFICE (ISO). An agency that recommends fire insurance rates based on a grading schedule that incorporates evaluation of fire fighting resources and capabilities.

LOG WALL CONSTRUCTION. A type of construction in which exterior walls are constructed of solid wood members and where the smallest horizontal dimension of each solid wood member is at least 6 inches (152 mm).

MULTILAYERED GLAZED PANELS. Window or door assemblies that consist of two or more independently glazed panels installed parallel to each other, having a sealed air gap in between, within a frame designed to fill completely the window or door opening in which the assembly is intended to be installed.

NONCOMBUSTIBLE. As applied to building construction material, indicates a material that, in the form in which it is used, is either one of the following:

1. Material of which no part will ignite and burn when subjected to fire. Any material conforming to ASTM E 136 shall be considered noncombustible within the meaning of this section.

2. Material having a structural base of noncombustible material as defined in Item 1 above, with a surfacing material not over 1/8 inch (3.2 mm) thick, which has a flame-spread rating of 50 or less. Flame-spread rating as used herein refers to rating obtained according to tests conducted as specified in ASTM E 84.

"Noncombustible" does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances or other sources of high temperature shall refer to material conforming to Item 1. No material shall be classed as noncombustible that is subject to increase in combustibility or flame-spread rating, beyond the limits herein established, through the effects of age, moisture or other atmospheric condition.

NONCOMBUSTIBLE ROOF COVERING. One of the following:

1. Cement shingles or sheets.
2. Exposed concrete slab roof.
3. Ferrous or copper shingles or sheets.
4. Slate shingles.
5. Clay or concrete roofing tile.
6. Approved roof covering of noncombustible material.

SLOPE. The variation of terrain from the horizontal; the number of feet (meters) rise or fall per 100 feet (30 480 mm) measured horizontally, expressed as a percentage.

STRUCTURE. That which is built or constructed, an edifice or building of any kind, or any piece of work artificially built up or composed of parts joined together in some manner.

TREE CROWN. The primary and secondary branches growing out from the main stem, together with twigs and foliage.

UNENCLOSED ACCESSORY STRUCTURE. An accessory structure without a complete exterior wall system enclosing the area under roof or floor above.

URBAN-WILDLAND INTERFACE AREA. That geographical area where structures and other human development meets or intermingles with wildland or vegetative fuels.

VEGETATIVE FUEL TYPES

Following are just a few main examples of fuel types:

BRUSH, TALL. Arbor-like varieties of brush species and/or short varieties of broad leaf trees that grow in compact groups or clumps. These groups or clumps reach heights of 4 to 20 feet. In Utah, this includes primary varieties of oak, maple, chokecherry, serviceberry and mahogany, but may also include other species.

TREES, CONIFER. Evergreen with needled or scale leaves. In Utah, this would include species of pine, juniper, spruce, fir and Douglas-fir.

TREES, DECIDUOUS. Broad leaf trees that experience leaf fall in the Autumn. In Utah, this would includes species of aspen, birch, cottonwood, and willow.

WILDFIRE. An uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures.

WILDLAND. An area in which development is essentially nonexistent, except for roads, railroads, power lines and similar facilities.